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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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26304	7590	07/02/2004	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN			KADING, JOSHUA A	
575 MADISON AVENUE			ART UNIT	
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2661
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/785,090

Applicant(s)

SAITO ET AL.

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

5 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 8, and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10 Claim 4 recites the limitation "the network identifier" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is not clear if "the network identifier" was meant to make reference to "a network identification information" in claim 1 or if it is a new limitation.

15 Claim 8 recites the following "the routing control unit selects a network in which a remaining bandwidth of the multiple networks is greater." This is confusing and seems to be inconsistent with applicant's specification, see page 37, lines 4-10. Does applicant mean that the network chosen has a the greatest bandwidth of the multiple networks, as
20 implied in the specification? Or is the network that is chosen have a smaller bandwidth than the sum of all the multiple networks, as implied by the claim?

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Claim 10, line 3 discloses "the network". It is unclear which network applicant is referring to. Is it the network from the multiple networks in claim 7 or is it the other network referenced to previously in claim 10, line 3 (i.e. "another network")?

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15

Claims 1, 3-9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (U.S. Patent 6,563,835 B1) in view of Morgenstern et al. (U.S. Patent 6,587,467 B1).

20

Regarding claim 1, Chen discloses "a switching system for accommodating a plurality of subscriber devices...and transmitting a call setup request received from a subscriber device of the plurality of subscriber devices to a network..., the switching system comprising:

25

a switch receiving a call setup request having an information element from the subscriber device (col. 4, lines 42-44 where having a calling party address shows that the request came from a subscribing device, and one of the descriptors is the information element);

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a call control unit (col. 5, lines 51-52)...;

and a routing control unit (col. 6, lines 29-30) selecting, based on the network identification information, a network... which include at least two different routing methods (col. 6, lines 30-35 where having more than one path is the same as having at least two different routing methods)."

However, Chen lacks what Morgenstern discloses, "...multiple networks (figure 2, where there are multiple ATM networks, several private and one public)..." and "collating the information element and station data, and extracting, from the station data, a network identification information that corresponds to the information element (col. 14, lines 5-11, where the information element (VPI since it describes the forward/backward directions of the message as in Chen) arrives in the station data (SETUP message) and is finally collated and the result is the network identification information (the new VPI that replaces the VPI in the SETUP message))..."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the "multiple networks" and "collating the information and station data" with the rest of the system of the purpose of communicating data between the public and private ATM networks, which use different signalling. The motivation is that by setting up connections (virtual paths) between the two network types, many virtual paths can be created over just one single physical path, thus reducing cost and the need for more physical connections (Morgenstern, col. 6, lines 38-41).

Regarding claim 3, Chen and Morgenstern disclose the system of claim 1.

However, Morgenstern lacks what Chen further discloses, "the information element is a subscriber identifier (col. 4, lines 42-44 where although the descriptors aren't specifically identifying a subscriber, they are used to setup the virtual path, which must identify the subscriber through the calling number so that the call data is correctly routed back and forth)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the subscriber identifier with the system of claim 1 for the same reasons and motivation as in claim 1.

Regarding claims 4 and 6, Chen and Morgenstern disclose the system of claim 1.

However, Chen lacks what Morgenstern further discloses, "the information element includes a value of [a] network identifier indicating a routing destination (col. 14, lines 5-11 where, as is known in the art, a VPI element identifies a routing destination)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the network identifier indicating a routing destination with the system of claim 1 for the same reasons and motivation as in claim 1.

Regarding claim 5, Chen and Morgenstern disclose the system of claim 1.

However, Morgenstern lacks what Chen further discloses, "the information element includes a value of a traffic class (col. 4, lines 42-46 where the QoS information represents a value of a traffic class as defined in applicant's specification, page 25, line 20)." It would have been obvious to one with ordinary skill in the art at the time of

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invention to include the traffic class element with the system of claim 1 for the same reasons and motivation as in claim 1.

Regarding claim 7, Chen discloses "a switching system for accommodating a plurality of subscriber devices...and transmitting a call setup request received from a subscriber device of the plurality of subscriber devices to a network...the switching system comprising:

a switch receiving a call setup request having an information element from the subscriber device (col. 4, lines 42-44 where having a calling party address shows that the request came from a subscribing device, and one of the descriptors is the information element);

a call control unit (col. 5, lines 51-52)...;

and a routing control unit (col. 6, lines 29-30) selecting, based on a state of use of...a network...which include at least two different routing methods (col. 6, lines 30-35 where having more than one path is the same as having at least two different routing methods, and since the routes are selected based on performance constraints (which represent the current operating conditions of the network), they are selected based on a state of the network)."

However, Chen lacks what Morgenstern discloses, "...multiple networks (figure 2, where there are multiple ATM networks, several private and one public)..." and "collating the information element and station data, and extracting, from the station data, a network identification information that corresponds to the information element (col. 14,

lines 5-11, where the information element (VPI since it describes the forward/backward directions of the message as in Chen) arrives in the station data (SETUP message) and is finally collated and the result is the network identification information (the new VPI that replaces the VPI in the SETUP message))..."

5 It would have been obvious to one with ordinary skill in the art at the time of invention to include the "multiple networks" and "collating the information and station data" with the rest of the system of the purpose of communicating data between the public and private ATM networks, which use different signalling. The motivation is that by setting up connections (virtual paths) between the two network types, many virtual
10 paths can be created over just one single physical path, thus reducing cost and the need for more physical connections (Morgenstern, col. 6, lines 38-41).

It is assumed applicant intends to choose the network with the greatest bandwidth as per the specification, claim 8 will therefore be treated as such.

15 Regarding claim 8, Chen and Morgenstern disclose the system of claim 7. However, Morgenstern lacks what Chen further discloses, "the routing control unit selects a network in which a remaining bandwidth of the multiple networks is greater (col. 6, lines 29-35 whereby choosing the path (network) with the best utilization, Chen is suggesting that the choice is made primarily on utilization or bandwidth use)." It would
20 have been obvious to one with ordinary skill in the art at the time of invention to include the selecting of the network with the greatest remaining bandwidth with the system of claim 7 for the same reasons and motivation as in claim 7.

Regarding claim 9, Chen and Morgenstern disclose the system of claim 7.

However, Morgenstern lacks what Chen further discloses, "the routing control unit selects a network in which a call quantity per unit time of the multiple networks is small

5 (col. 1, lines 28-30 shows that the number of calls in a network is an important performance objective, which can be related to col. 6, lines 29-35 because the number of calls per unit time in a network is directly related to that networks utilization, and Chen discloses that the chosen path (network) is the path with the best utilization, or in terms of calls would be the least amount of calls)." It would have been obvious to one

10 with ordinary skill in the art at the time of invention to include the selecting of the network based on the number of calls per unit time with the system of claim 7 for the same reasons and motivation as in claim 7.

Regarding claim 11, Chen and Morgenstern disclose the system of claim 7.

15 However, Chen lacks what Morgenstern discloses, "...network identifiers corresponding to each value of the information elements (col. 14, lines 5-11, where the information element (VPI since it describes the forward/backward directions of the message as in Chen) arrives in the station data (SETUP message) and is used to arrive at the network identification information (the new VPI that replaces the VPI in the SETUP

20 message))..."; and Morgenstern lacks what Chen further discloses, "the call setup request received from the subscriber device includes information elements on which the routing is based (col. 4, lines 42-44 where one of the descriptors is the information

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element and directly describes the route), and station data that includes priorities corresponding to each of the information elements (col. 4, lines 46 where the QoS is a priority that is given to each descriptor (Morgenstern describes the descriptors as VPI and it is known in the art that each VPI has its own QoS))... , and wherein the routing

5 control unit selects a network among the networks based on a network identifier corresponding to the top priority (col. 6, lines 30-35 where having more than one path is the same as having at least two different routing methods, and since the routes are selected based on performance constraints (which represent the current operating conditions of the network), they are selected based on a state of the network)."

10 It would have been obvious to one with ordinary skill in the art at the time of invention to include the network identifiers, information elements, and using these to select a route with the system of claim 7 for the same reasons and motivation as in claim 7.

15 Regarding claim 12, Chen discloses "a routing method for a switching system that accommodates a subscriber device..., comprising the steps of:

receiving a call setup request having an information element from said subscriber device (col. 4, lines 42-44 where having a calling party address shows that the request came from a subscribing device, and one of the descriptors is the information element);

20 selecting a network...based on a value of the network identifier (col. 6, lines 30-35 where having more than one path is the same as selecting a network based on the value of the network identifier);

and transmitting the call setup request to the network (col. 4, lines 55-58)."

However, Chen lacks what Morgenstern discloses, "...multiple networks (figure 2, where there are multiple ATM networks, several private and one public)..." and "selecting a network identifier from network identifiers stored in station data, based on a value of the information element (col. 14, lines 5-11, where the information element (VPI since it describes the forward/backward directions of the message as in Chen) arrives in the station data (SETUP message) and is finally collated and the result is the network identification information (the new VPI that replaces the VPI in the SETUP message))..."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the "multiple networks" and "collating the information and station data" with the rest of the system of the purpose of communicating data between the public and private ATM networks, which use different signalling. The motivation is that by setting up connections (virtual paths) between the two network types, many virtual paths can be created over just one single physical path, thus reducing cost and the need for more physical connections (Morgenstern, col. 6, lines 38-41).

Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen and Morgenstern et al. as applied to claims 1 and 12 above, and further in view of Ohba et al. ("Interworking Between Public ATM Network and Enterprise ATM Network", IEEE).

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Regarding claims 2 and 13, Chen and Morgenstern disclose the system of claim 1 and the method of claim 12. However, Chen and Morgenstern lack what Ohba discloses, "the multiple networks include at least a PNNI network and a B-ISUP network (figure 2, where an enterprise network is a private network)." It would have been
5 obvious to one with ordinary skill in the art at the time of invention to include the PNNI and B-ISUP networks with the system of claim 1 and the method of claim 12 for the purpose of connecting several enterprise networks with a public network. The motivation for doing this is that this will increase the economic and seamless connection of the enterprise networks with the public networks (Ohba, page 1290, section 6, lines
10 18-19).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen and Morgenstern et al. as applied to claim 7 above, and further in view of Beshai et al. (U.S. Patent 6,667,956 B2).

15 It is assumed applicant means the network referred to in claim 7, claim 10 will be treated as such.

Regarding claim 10, Chen and Morgenstern disclose the system of claim 7. However, Chen and Morgenstern lack what Beshai discloses, "when the transmitted call setup request is refused, the switch transmits the call setup request to another network
20 other than the network (col. 12, lines 5-22 whereby allowing other nodes (networks) to continue with the selecting scheme even though the request may have been denied is in effect sending the request to a different network after a refusal)." It would have been

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obvious to one with ordinary skill in the art at the time of invention to include the sending the request to a different network after a refusal with the system of claim 7 for the purpose of finding an optimal routing path. The motivation is that by finding the optimal routing path, less network resources are wasted (Beshai, col. 12, lines 24-26).

5

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

10 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

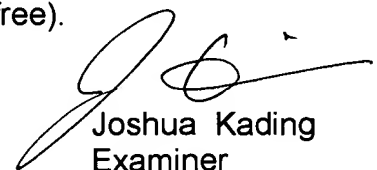
15 Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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June 23, 2004



KENNETH VANDERPUYE
PRIMARY EXAMINER



Joshua Kading
Examiner
Art Unit 2661